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7590 06/20/2005	**EXAMINER**
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/841,644	ANDRADE ET AL.
	Examiner	Art Unit	
	Chris Parry	2614	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>23 April 2001</u>.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-40</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) <u>1-40</u> is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on <u>23 April 2001</u> is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All b) ☐ Some * c) ☐ None of:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. _____.
    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date <u>08/01,01/02,06/03</u>.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4)

because reference character "112" has been used to designate both Interactive TV

Trigger and Web Server in Figure 1. Corrected drawing sheets in compliance with 37

CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the

application. Any amended replacement drawing sheet should include all of the figures

appearing on the immediate prior version of the sheet, even if only one figure is being

amended. Each drawing sheet submitted after the filing date of an application must be

labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37

CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be

notified and informed of any required corrective action in the next Office action. The

objection to the drawings will not be held in abeyance.

Specification

2.   The disclosure is objected to because of the following informalities: On page 4, ¶

24 on line 3, Reference number **108** for TV broadcast is after the word along instead of

broadcast. On page 5, ¶ 25 line 1, "can include **on** or more databases" should read

"can include **one** or more databases". On page 5, ¶ 27 on line 2, the parenthesizes

statement is missing a closing parenthesize. On page 6, ¶ 30 on line 3, "Decoder **202**

can receive input signals 120" should read "Decoder **232** can receive input signals 120".

On page 9, ¶ 39 on line 6, "Repository **304** provides interactive keys" should read

"Repository **304A** provides interactive keys". On page 10, ¶ 43 on line 1, the examiner

is unclear as to what applicant is referencing as "Look-Up Table 405". Applicant should

clarify reference to be either "Look up Module 405" or "Look-Up Table 610".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a
foreign country or in public use or on sale in this country, more than one year
prior to the date of application for patent in the United States.

4.   Claims 1, 2, 7-9, 11, 12, 17-19, 21, 22, 30, 31, 39, and 40 are rejected under 35

U.S.C. 102(b) as being anticipated by Zdepski et al. (hereinafter "Zdepski").

Regarding Claim 1, Zdepski discloses a broadcast station that includes a

receiver configured to receive the combined signal, a trigger extraction unit configured

to extract the interactive command from the combined signal, and an interactive

program source configured to control the interactive program in response to the

interactive command. The broadcast station further includes an interactive TV signal

generation unit configured to combine the television signal with the interactive program

to form an audio-video-interactive output signal (column 2, lines 59-67).

Regarding Claim 2, Zdepski show in figure 1, remote network 10 with Trigger

Insertion Unit 16. Trigger Insertion Unit 16 receives signals from Television Signal

Source 12 and Trigger Generator 14 and transmits the combined signal to modulator

18.

As for Claim 7, Zdepski teaches when interactive program source 58 receives a trigger, it first authenticates the trigger by determining whether the Authentication Code of the trigger is an authorized value. If the trigger passes the authentication check, interactive program source 58 performs an operation in accordance with the Command Code and Interactive Program ID of the trigger. For example, interactive program source 58 may first receive a command to load an interactive program specified by Interactive Program ID "1011", in response to which interactive program source 58 loads the specified program from mass storage into a local memory (i.e., DRAM) (column 5, lines 42-52).

As for Claim 8, figure 1 of Zdepski discloses, AVI Transmission Unit 68, which combines the television signal with the interactive program to form an audio-video-interactive output signal and satellite uplink 62 transmits combined AVI signal to several end-users.

As for Claim 9, figure 4 of Zdepski show remote network 400 and broadcast station 450. Broadcast station 450 receives AVI signal from remote network 400 and within broadcast station 450 associates the interactive trigger with an interactive program. AVI Generation Unit 60 then combines the television signal with the interactive trigger coupled with interactive program.

Regarding Claim 11, figure 1 of Zdepski show, a broadcast station 50 comprising an AVI Generation Unit 60, Trigger Extraction Unit 56, and Interactive Program Source 58. Trigger Extraction Unit 56 extracts the trigger from the television signal where the television signal is forwarded to AVI Generation Unit 60. The trigger is sent to

Interactive Program Source 58, where the trigger is matched with an interactive

program. The combined trigger and interactive program signal is then passed on to AVI

Generation Unit 68 to be combined with the television signal.

As for Claim 12, figure 1 of Zdepski discloses, Trigger Extraction Unit 56, which

recognizes the interactive command from the AVI signal and extracts the interactive

command from the AVI signal.

As for Claim 17, Zdepski teaches interactive program source 58, may be formed

by flow manager and server including a plurality of interactive programs contained in

mass storage (column 5, lines 36-38). When interactive program source 58 receives a

trigger, it first authenticates the trigger by determining whether the Authentication Code

of the trigger is an authorized value. If the trigger passes the authentication check,

interactive program source 58 performs an operation in accordance with the Command

Code and Interactive Program ID of the trigger. For example, interactive program

source 58 may first receive a command to load an interactive program specified by

Interactive Program ID "1011", in response to which interactive program source 58

loads the specified program from mass storage into a local memory (i.e., DRAM)

(column 5, lines 42-52).

As for Claim 18, figure 1 of Zdepski discloses, AVI Transmission Unit 68, which

combines the television signal with the interactive program to form an audio-video-

interactive output signal and satellite uplink 62 transmits AVI signal to several end-

users.

As for Claim 19, figure 4 of Zdepski discloses remote network 400 and broadcast station 450. Broadcast station 450 receives AVI signal from remote network 400 and within broadcast station 450 associates the interactive trigger with an interactive program. AVI Generation Unit 60 then combines the television signal with the interactive trigger coupled with interactive program.

Regarding Claim 21, Zdepski teaches the broadcast station includes a receiver configured to receive the combined signal, a trigger extraction unit configured to extract the interactive command from the combined signal, and an interactive program source configured to control the interactive program in response to the interactive command. The broadcast station further includes an interactive TV signal generation unit configured to combine the television signal with the interactive program to form an audio-video-interactive output signal (column 2, lines 59-67).

As for Claim 22, figure 1 of Zdepski, discloses Trigger Extraction Unit 56 forwards television signal to AVI Transmission Unit 68, which sends television signal to satellite uplink 62.

Regarding Claim 30, figure 1 of Zdepski, discloses Trigger Extraction Unit 56, which recognizes and extracts trigger from received AVI signal. Interactive Program Source 58 receives extracted trigger where trigger is checked to see if Program ID matches up with available interactive programs. If the program ID matches with interactive program, AVI Generation Unit 68 combines the television signal with the interactive program to form an audio-video-interactive output signal.

As for Claim 31, figure 1 of Zdepski, discloses A-V Compression Unit 64, which compresses the television signal, and forwards the television signal to AVI Transmission Unit 68. The television signal is then sent to satellite uplink 62.

Regarding Claim 39, Zdepski teaches, interactive program source 58 may be formed by a flow manager and server including a plurality of interactive programs contained in mass storage. As previously discussed above, Trigger Extraction Unit 56 recognizes and extracts interactive command from AVI signal. Trigger is sent to interactive program source 58, where the extracted trigger is provided to an interactive flow manager and server to control the loading or playing of an interactive program identified by the trigger. If interactive program is loaded, program is combined with television signal at AVI Transmission Unit 68. It is inherently known in the art, servers include microprocessors to control and execute instructions, in this case to control the loading and playing of interactive programs identified by the trigger.

As for Claim 40, Zdepski teaches AVI generation unit 60 is a mechanism configured to combine a television signal from trigger extraction unit 56 with an interactive program from interactive program source 58 to thereby generate an AVI signal for subsequent transmission (column 5, lines 58-62). Data input unit 66 may temporarily buffer interactive program information until AVI transmission unit 68 can receive the information (column 6, lines 5-7). While interactive program is buffered, AVI transmission unit 68 is transmitting the TV signal until it is ready to receive the interactive program from data input unit 66. It is inherently know in the art, to process this data, a microprocessor is necessary to control and execute instructions, in this case

to control when data input 66 should transmit interactive program to AVI transmission

unit 68.

5.   Claims 1, 2, 6, 7, 11, 12, 16, 17, 21, 26, 30, and 35 are rejected under 35

U.S.C. 102(b) as being anticipated by Feinleib (U.S. 6,637,032 B1).

        Regarding Claim 1, Feinleib discloses in figure 6, central processing unit 90 that

comprises of a processor 92, volatile memory 94 (e.g., RAM), and program memory 96

(e.g., ROM, disk drive, floppy disk drive, CD-ROM, etc.). Program memory 96

comprises of software programs, parser 110, and HTML page with listener 112. The

closed captioning parser 110 is configured to monitor the closed captioning script as the

video program is played to detect the key phrases listed in data file 62 (column 11, lines

5-7). As the primary content plays, the closed captioning parser 110 monitors the

successive word groups in the closed captioning script (step 124 in FIG. 7) (column 11,

lines 28-30). When a group of words matches a key phrase in the data structure 62 (i.e.,

the "yes" branch from step 128), the parser 110 looks up in the data file for the

supplemental data corresponding to the matched key phrase. In this manner, the data

file is utilized as an association look-up table. The supplemental data is associated with

the key phrases through the inherent corresponding field arrangement of the data

structure 62. The parser 110 retrieves the supplemental data from the key phrase data

file 62 (step 132 in FIG. 7) (column 11, lines 51-59). Supplemental data in plaintext

means it is a hyperlink (e.g., www.greetingcardco.com); supplemental data enclosed in

quotes means it is an executable file (e.g., "application.exe"); and supplemental data

enclosed in curly brackets means it is a trigger for arbitrary text or graphical data (e.g.,

[text]) (column 12, lines 28-33).

As for Claim 2, figure 3 of Feinleib discloses pre-determining the unique phrases

in the video program and associating the unique phrases with supplemental data.

As for Claim 6, Feinleib teaches the closed captioning parser 110 is configured to

monitor the closed captioning script as the video program is played to detect the key

phrases listed in data file 62 (column 11, lines 5-7). It is noted that, rather than the

parser 60, other types of key phrase identifiers can be used to identify key phrases in

the closed captioning script. For example, the processor might be directed to search the

closed captioning script for a single word, or a set of words (column 7, lines 35-39).

As for Claim 7, as discussed above for Feinleib, closed captioning parser 110

monitors closed captioning script for key phrases. If a key phrase is found, then closed

captioning parser 110 retrieves the supplemental data and inserts the data into the

stream.

As for Claim 11, Feinleib discloses in figure 6, central processing unit 90, which

inserts supplemental data into display 100.

As for Claim 12, Feinleib discloses in figure 6, central processing unit 90

comprises of closed captioning parser 110, which monitors the successive word groups

in the closed captioning script and matches phrases with key phrase data file 62.

As for Claim 16, Feinleib teaches the closed captioning parser 110 is configured

to monitor the closed captioning script as the video program is played to detect the key

phrases listed in data file 62 (column 11, lines 5-7). It is noted that, rather than the

parser 60, other types of key phrase identifiers can be used to identify key phrases in the closed captioning script. For example, the processor might be directed to search the closed captioning script for a single word, or a set of words (column 7, lines 35-39).

As for Claim 17, as discussed above for Feinleib, figure 6 discloses closed captioning parser 110, which monitors closed captioning script for key phrases. If a key phrase is found; then closed captioning parser 110 retrieves the supplemental data and inserts the data into the stream.

Regarding Claim 21, Feinleib teaches the closed captioning parser 110 is configured to monitor the closed captioning script as the video program is played to detect the key phrases listed in data file 62 (column 11, lines 5-7). As the primary content plays, the closed captioning parser 110 monitors the successive word groups in the closed captioning script (step 124 in FIG. 7). The parser 110 retrieves the supplemental data from the key phrase data file 62 (step 132 in FIG. 7) and inserts supplemental data into the broadcast stream within receiver.

As for Claim 26, Feinleib teaches the closed captioning parser 110 is configured to monitor the closed captioning script as the video program is played to detect the key phrases listed in data file 62 (column 11, lines 5-7). It is noted that, rather than the parser 60, other types of key phrase identifiers can be used to identify key phrases in the closed captioning script. For example, the processor might be directed to search the closed captioning script for a single word, or a set of words (column 7, lines 35-39).

Regarding Claim 30, Feinleib teaches the closed captioning parser 110 is configured to monitor the closed captioning script as the video program is played to

detect the key phrases listed in data file 62 (column 11, lines 5-7). As the primary

content plays, the closed captioning parser 110 monitors the successive word groups in

the closed captioning script (step 124 in FIG. 7) (column 11, lines 28-30). When a group

of words matches a key phrase in the data structure 62 (i.e., the "yes" branch from step

128), the parser 110 looks up in the data file for the supplemental data corresponding to

the matched key phrase. In this manner, the data file is utilized as an association look-

up table. The supplemental data is associated with the key phrases through the inherent

corresponding field arrangement of the data structure 62. The parser 110 retrieves the

supplemental data from the key phrase data file 62 (step 132 in FIG. 7) (column 11,

lines 51-59). Supplemental data is then added to the broadcast data stream within the

receiver.

As for Claim 35, Feinleib teaches the closed captioning parser 110 is configured

to monitor the closed captioning script as the video program is played to detect the key

phrases listed in data file 62 (column 11, lines 5-7). It is noted that, rather than the

parser 60, other types of key phrase identifiers can be used to identify key phrases in

the closed captioning script. For example, the processor might be directed to search the

closed captioning script for a single word, or a set of words (column 7, lines 35-39).

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made

to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7.   Claims 10, 20, 30, 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zdepski.

Regarding Claims 10, 20, 29, and 38 Zdepski teaches interactive program source is configured to control the interactive program in response to the interactive command (column 2, lines 62-64). Zdepski fails to explicitly teach using ATVEF triggers. The examiner gives Official Notice that it is notoriously well known in the art of inserting enhanced content into the broadcast, to use ATVEF triggers as the Advanced Television Enhancement Forum Specification was developed to define the fundamentals necessary to enable creation of HTML-enhanced television content so that it can be reliably broadcast across any network to any compliant receiver. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Zdepski with interactive TV triggers that include ATVEF triggers.

As for Claim 27, Zdepski teaches, interactive program source 58 receives a trigger, it first authenticates the trigger by determining whether the Authentication Code of the trigger is an authorized value. If the trigger passes the authentication check, interactive program source 58 performs an operation in accordance with the Command Code and Interactive Program ID of the trigger. For example, interactive program source 58 may first receive a command to load an interactive program specified by Interactive Program ID "1011", in response to which interactive program source 58

loads the specified program from mass storage into a local memory (i.e., DRAM) (column 5, lines 42-52). Zdepski fails to teach checking if the trigger matches with an attribute associated with the interactive program. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Zdepski by checking if the media asset matches with an attribute associated with the interactive element. One would have been motivated to make this modification for the purpose of inserting interactive elements with elements that match in the broadcast data stream for timely delivery of enhanced content to the end user.

As for Claim 28, Zdepski teaches AVI generation unit 60 combines the interactive programming information with the audio and video components of the television signal to form an AVI signal for transmission via satellite uplink 62 (column 7, lines 61-65). Zdepski fails to teach whether the interactive program includes the interactive TV trigger. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Zdepski by including the interactive TV trigger with the interactive element. One would have been motivated to make this modification for the purpose of having the interactive TV trigger alert the end-user of the interactive element available for delivery.

As for Claim 36, Zdepski fails to teach checking if the trigger matches with an attribute associated with the interactive program. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Zdepski by checking if the media asset matches with an attribute associated with the interactive element. One would have been motivated to make this

modification for the purpose of inserting interactive elements with elements that match

in the broadcast data stream for timely delivery of enhanced content to the end user.

As for Claim 37, Zdepski teaches AVI generation unit 60 combines the interactive

programming information with the audio and video components of the television signal

to form an AVI signal for transmission via satellite uplink 62 (column 7, lines 61-65).

Zdepski fails to teach whether the interactive program includes the interactive TV

trigger. However, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the teachings of Zdepski by including the

interactive TV trigger with the interactive element. One would have been motivated to

make this modification for the purpose of having the interactive TV trigger alert the end-

user of the interactive element is available for delivery.

8.   Claims 3-5, 13-15, 23-25, and 32-34 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Zdepski in view of Perlman (U.S. 6,5,77,346 B1).

Regards to Claims 3-5 and 13-15, Zdepski fails to teach inserting TV triggers

based on the recognized elements of video, audio, and voice in the broadcast data

stream. Perlman teaches a system and method for recognizing a pattern in a video

segment using the viewable video image data and/or the video sound data to identify

the video segment (column 9, lines 52-55). Perlman further teaches the video segment

is then monitored for patterns (step 320). After a pattern is recognized in the video

segment (step 330), the recognized pattern is then looked up in a table (340) correlating

various patterns with an identification of video segments that can be expected to include

such patterns. If a match is not found in the video segment ("NO" in decision block 350),

the process continues to monitor the video segment (step 320) to recognize and look up

other patterns (steps 330 and 340) until a match is found in the table ("YES" in decision

block 350). After a match is found, then the video segment is identified as being the

video segment that corresponds to the pattern in the table (step 360). The management

unit 102 might perform any number of functions with this identification. For example, if

the video segment is identified as being a commercial for a specific product, the

management unit might cause an icon to be displayed on the display device 104. If the

viewer selects the icon, the management unit 102 might, for example, transmit a Web

page request corresponding to the product advertised so that the viewer can obtain

more information concerning the product if desired (column 7, lines 16-38). Therefore, it

would have been obvious to one of ordinary skill in the art at the time the invention was

made to modify Zdepski with the teachings of Perlman by inserting TV triggers based on

the recognized elements of audio, voice, and video within the broadcast data stream.

One would have been motivated to insert TV triggers based on the aforementioned

recognized elements for the advantage of inserting TV triggers at any point during the

broadcast where enhanced content would be appropriate and closed captioning script

would not identify.

As for Claims 23-25 and 32-34, Zdepski fails to teach inserting TV triggers based

on the recognized media assets of video, audio, and voice in the broadcast data stream.

Perlman teaches a system and method for recognizing a pattern in a video segment

using the viewable video image data and/or the video sound data to identify the video

segment (column 9, lines 52-55). Therefore, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to modify Zdepski with the

teachings of Perlman by inserting TV triggers based on the recognized media assets of

audio, voice, and video within the broadcast data stream. One would have been

motivated to insert TV triggers based on the aforementioned recognized media assets

for the advantage of inserting TV triggers at any point during the broadcast where

enhanced content would be appropriate and closed captioning script would not identify.

9.   Claims 3-5, 13-15, 23-25, and 32-34 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Feinleib in view of Perlman.

Regarding Claims 3-5 and 13-15, Feinleib fails to teach inserting TV triggers

based on the recognized elements of video, audio, and voice in the broadcast data

stream. Perlman teaches a system and method for recognizing a pattern in a video

segment using the viewable video image data and/or the video sound data to identify

the video segment (column 9, lines 52-55). Perlman further teaches the video segment

is then monitored for patterns (step 320). After a pattern is recognized in the video

segment (step 330), the recognized pattern is then looked up in a table (340) correlating

various patterns with an identification of video segments that can be expected to include

such patterns. If a match is not found in the video segment ("NO" in decision block 350),

the process continues to monitor the video segment (step 320) to recognize and look up

other patterns (steps 330 and 340) until a match is found in the table ("YES" in decision

block 350). After a match is found, then the video segment is identified as being the

video segment that corresponds to the pattern in the table (step 360). The management

unit 102 might perform any number of functions with this identification. For example, if

the video segment is identified as being a commercial for a specific product, the

management unit might cause an icon to be displayed on the display device 104. If the

viewer selects the icon, the management unit 102 might, for example, transmit a Web

page request corresponding to the product advertised so that the viewer can obtain

more information concerning the product if desired (column 7, lines 16-38).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify Feinleib with the teachings of Perlman by

inserting TV triggers based on the recognized elements of audio, voice, and video within

the broadcast data stream. One would have been motivated to insert TV triggers based

on the aforementioned recognized elements for the advantage of inserting TV triggers

at any point during the broadcast where enhanced content would be appropriate and

closed captioning script would not identify.

As for Claims 23-25 and 32-34, Feinleib fails to teach inserting TV triggers based

on the recognized media assets of video, audio, and voice in the broadcast data stream.

Perlman teaches a system and method for recognizing a pattern in a video segment

using the viewable video image data and/or the video sound data to identify the video

segment (column 9, lines 52-55). Therefore, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to modify Feinleib with the

teachings of Perlman by inserting TV triggers based on the recognized media assets of

audio, voice, and video within the broadcast data stream. One would have been

motivated to insert TV triggers based on the aforementioned recognized media assets

for the advantage of inserting TV triggers at any point during the broadcast where

enhanced content would be appropriate and closed captioning script would not identify.

10.   Claims 6, 16, 26, and 35 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Zdepski in view of Feinleib.

Regarding Claims 6 and 16, Zdepski fails to teach inserting TV triggers based on

the recognized element of text in the broadcast data stream. Feinleib teaches a system

and method uses the closed captioning script to synchronize supplemental data with

specified junctures in a video program (Abstract). Therefore, it would have been obvious

to one of ordinary skill in the art at the time the invention was made to modify Zdepski

with the teachings of Feinleib to insert interactive programming based on recognized

text in the broadcast data stream. One would have been motivated to make this

modification for the benefit of when text is in the data stream or will be displayed,

related enhanced content can be added to the broadcast to with the text.

As for Claims 26 and 35, Zdepski fails to teach inserting TV triggers based on the

recognized media asset of text patterns in the broadcast data stream. Feinleib teaches

a system and method uses the closed captioning script to synchronize supplemental

data with specified junctures in a video program (Abstract). Therefore, it would have

been obvious to one of ordinary skill in the art at the time the invention was made to

modify Zdepski with the teachings of Feinleib to insert interactive programming based

on recognized text patterns in the broadcast data stream. One would have been

motivated to make this modification for the benefit of when text is in the data stream or

will be displayed, related enhanced content can be added to the broadcast to with the

text.

Conclusion

11.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

The following patents are cited to further show the state of the art with respect to

inserting triggers:

   U.S. Pat. No. 6,668,378 B2 to Leak et al.

   U.S. Pat. No. 6,460,180 B1 to Park et al.

   U.S. Appl. No. 09/782,229 to Martinolich et al.

The following patents are cited to further show the state of the art with respect to

method and systems for interactive television:

   U.S. Pat. No. 6,415,303 B1 to Meier et al.

   U.S. Pat. No. 6,698,020 B1 to Zigmond et al.

   U.S. Pat. No. 6,571,392 B1 to Zigmond et al.

   U.S. Pat. No. 5,937,331 to Kalluri et al.

   U.S. Pat. No. 5,774,664 to Hidary et al.

   U.S. Appl. No. 09/818,052 to Reynolds et al.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Chris Parry whose telephone number is (571) 272-8328.

The examiner can normally be reached on Monday through Friday, 8:30 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

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Examiner's Initials:_CLP_
June 3, 2005

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